Articles

Reduction of power consumption and carbon footprints by applying multi-objective optimisation via genetic algorithms

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Abstract

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algorithm II (NSGA-II) is implemented, which identifies the set of approximate efficient

schedules to both multi-objective scheduling problems. Moreover, an adaptive multi-objective genetic algorithm (AMGA) is developed to generate the reference Pareto front, which validates the results that are obtained using NSGA-II. Results of this study demonstrate both the effectiveness of AMGA in converging to the true Pareto-optimal set and the efficiency of NSGA-II.

Q Keywords: scheduling | carbon footprint | total weighted tardiness | multi-objective genetic algorithms

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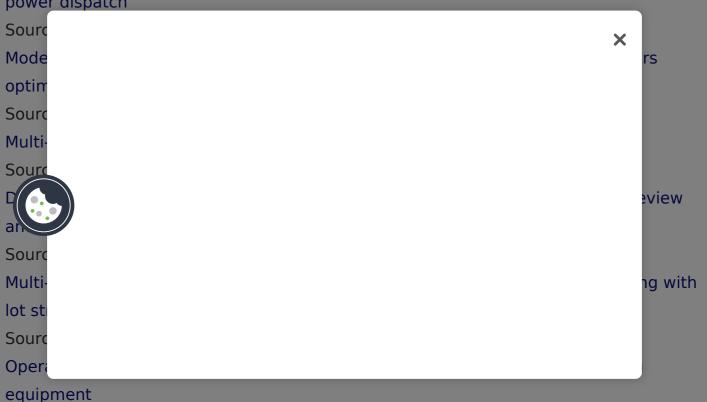Production scheduling optimisation with machine state and time-dependent energy costs
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